

Characteristics and General Production Parameters of Hair Sheep Breeds

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The breeds of hair sheep that are of importance at the moment in British Columbia include Katahdin, St. Croix and North American Blackbelly. Some of the ancestors of these breeds originated in Africa and were brought to the Caribbean Islands, Central America and northern South America during the 18th and 19th century. Some European sheep genetics were incorporated into the African sheep to arrive at the existing hair breeds mentioned above. These breeds are called hair sheep because the coat consists of hair more like that of cattle and many goats rather than wool. The Dorper is not a true hair sheep, but is included in this fact sheet because it is used in cross breeding programs involving hair sheep.

Hair sheep have some attributes that make them admirably suited to fill market niches or fit varying production systems in North America. For instance, they have extended breeding season, and can be used to produce lambs to be marketed when lamb prices are usually high thereby reducing marketing risks. In addition, shearing is not a requirement thereby reducing operational cost. They shed their winter coats during spring and early summer. They are generally more fertile in hot humid regions and show greater tolerance to parasites than wool breeds. They have less subcutaneous fat on average and are a bit leaner because there is less feathering in the muscles. In general they have low maintenance requirements.

The major disadvantage is that they grow slower and produce a lighter weight carcass than most breeds of European origin. This is true for North American Blackbelly and St. Croix in particular, because they have not been subjected to selection for size and growth rate of the woolen breeds. However, they are suitable for markets requiring smaller carcass size. Dorper and Katahdin are medium size breeds. Crossing these breeds with woolen breeds for efficient meat production does hold some potential.

Some general information on woolen sheep is found on the next page. This information may be used as a standard to which hair sheep can be compared. It should be kept in mind that performance varies greatly with genetic, management, climate, etc. and, as such, some of the data for typical woolen breeds are provided as a range.

FACTSHEET



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Fall 2003

	TYPICAL NORTH AMERICAN BREED	DORPER
		
Dorper		
		
North American Blackbelly		
		
Katahdin		
		
St. Croix		
		
Barbados Blackbelly		
	Origin	Sheep were brought to North America by Spanish and English settlers. Their genetics were used in Canada and USA to develop some new breeds
	Coat & Colour	Range from white through mainly tan to black. Coats are usually woollen, amount vary with breed
	Matured Weight (Lb.)	Ewe = 220-250 Ram = 250-350 (For Suffolks)
	Disposition & Mothering Ability	Ewes are docile with good mothering ability. Produce large quantity of milk.
	Environmental Adaptability	Generally well adapted to cool temperate environment
	Breeding Season	Precedes shortest day of the year, but vary in extent according to breed. Some breed out of season
	Lambing Interval	12 months, but can be less with those breeding out of season
	Lambing %	120-250 180 (for Suffolks)
	Average Birth Wt (lb.)	5 - 15 lbs depending number of lambs born per ewe
	Weight Gain/day	.9 lbs for Suffolks (Alberta test station)
	Mk Wt (live)/ Age	90 -120 lbs 100 - 150 lbs for Suffolk
	Dressing %	48 - 52 for Suffolks
		This mutton breed was developed in South Africa in 1930's from Dorset Horn and Blackheaded Persian for the extensive and regions of South Africa. Not a true hair sheep.
		Solid white or white with black head. Difference in colour is a matter of preference. The coat is a mixture of hair & wool and will shed from animal in late spring/early summer
		Ewe =170-200 (can be less than 170 lb.) Ram = 220-250
		Well adapted to hot, dry, humid and wet conditions. They are hardy and do well in range. Non selective grazers that perform well under both extensive & intensive production systems. When selecting breeding stock, choose animals with good feet.
		Long/extended
		Can be 8 months.
		Given an average lambing % of 150 and 3 lambing in 2 years, Dorper will produce 2.25 lambs on an annual basis.
		9.5
		1 lb under intensive production
		100 -110 lbs
		50

	"NORTH AMERICAN BLACKBELLY"	KATHADIN	ST.CROIX
	This breed is sometimes referred to as "Barbados Blackbelly", but it is different from the polled Barbados Blackbelly which is African in origin and evolved on the island of Barbados as a result of crosses with European breeds. This breed was imported in the US in 1904 and was crossed with Mouflon (wild sheep), Rambouillet and other European breeds to produce the Barbado or what is known as "North American Blackbelly".	This breed originated from Maine, U.S from crosses of woollen breeds mainly Suffolk and later Wiltshire Horn with hair sheep from Virgin Island. This breed was developed after 20 years of breeding and selection.	Developed in the Virgin Islands from crosses of West African hair sheep and Wiltshire Horn. In 1975 Utah State University imported a small flock of Virgin Island White which is the basis for the present St. Croix breed in North America
	Has a variety of colour ranging from black and tan through yellow with variegated mottled pattern. Black colour covers belly, inside legs & thighs and extends up the neck. In winter puts on coat that is shed as temperatures increase. Rams generally have horns.	Coat can be any colour or colour pattern. Hair coat becomes thick and long as cold weather sets in and ay length decreases. Sheds coat as temperature and day length increase. Some ewes shed coats after second lambing.	
	Ewe = 100-130 Ram =120-150	Ewe =120-160 Ram = 180-250	
	Extremely reactive to dogs and cats usually as though they wish to flee. It is more flighty than Dorper, Katahdin and St. Croix breeds. Ewes with young lambs show protective behaviour and may raise front feet to strike dogs and cats when confronted. Have good flocking instinct.	Ewes have good mothering ability and lamb easily unassisted. Good milkers, and is suggested not to wean lambs before three months.	
	Withstand heat and cold well, and part of this adjustment to extremes is behavioural. For example, cold wind and warm sun quickly result in herd finding shelter under conditions when woollen sheep remain in the open	Tolerant of both high and low temperatures. Breed ideal for pasture lambing and grass/forage based management systems	Withstand higher heat and humidity than British sheep breeds. In colder zones they produce a very heavy winter coat that is shed in spring. They are excellent foragers.
	Year round.	Long/extended	Year round
	7-9 months.	8-12 months	7 - 9 months
	Average lambing rate is between 150 and 250%. If ewes are fed well, lambing rate approaches the higher end.	Approximately 125 %; exceeding 200% with subsequent lambing.	Lambing rates vary from 150 to 250% with 3 lambing every 2 years not uncommon
	6.5	8.0	7.5 for single; 6.5 to 7 for twins and less or triplets
	0.5 lb/day	0.57 lb under intensive production	0.5 - 0.6 lbs
	100 -110 lbs/ 7 - 8 months	95 to 115 lbs/ 5.5 - 6 months	110 lbs/ 7 - 8 months
	51	54	50

Barbados Blackbelly

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This fact sheet was prepared as a result of a request from Okanagan Hair Sheep Society. The assistance of several sheep producers who were contacted for their input in preparing this document are sincerely acknowledged. The assistance of Cole Evans from Utah State University, Garry Vroegh from Dutch Heritage Farm and Tropical Sheep International, Stephane Wildeus from Virginia State University is acknowledged also. The information provided is based on personal communication, producers' experience and research. It is intended to provide general guidelines on what may be expected from hair sheep breeds. Anyone embarking on the production of hair sheep on a large scale should seek more information on each breed. The use of hair sheep for meat production in North America is fairly new compared with the use of European breeds. Scientific and production information of these breeds specific to British Columbia is limited. The use of hair sheep in cross breeding programs for meat production holds good potential. However, growth rate, feed conversion, and meat quality trials specific to BC conditions are required to equip producers with the information they can use to exploit the opportunities presented by the growing of hair sheep.